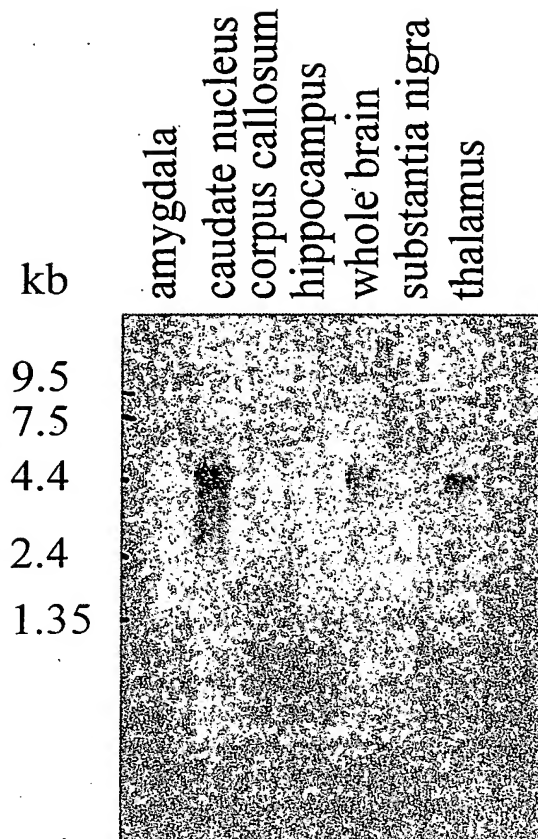


PANEL A



PANEL B

Fig. 1

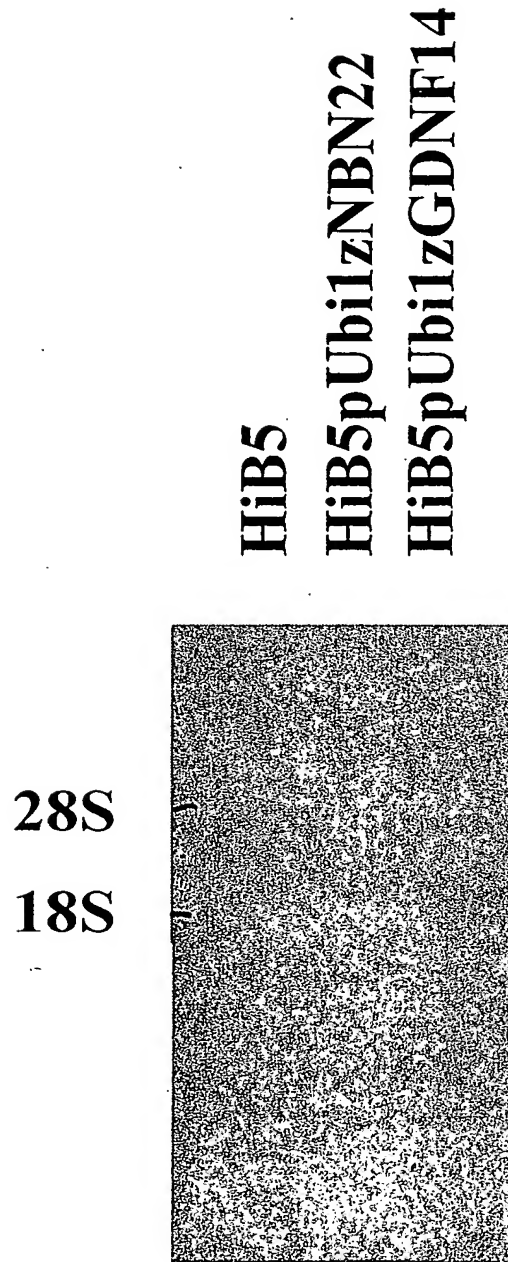


Fig. 2

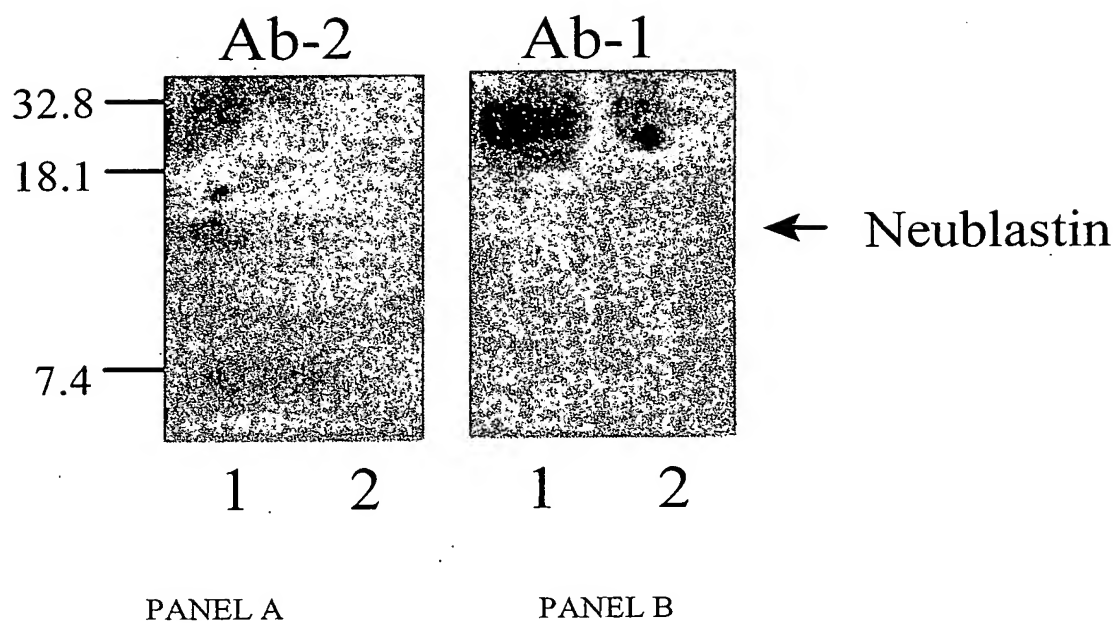
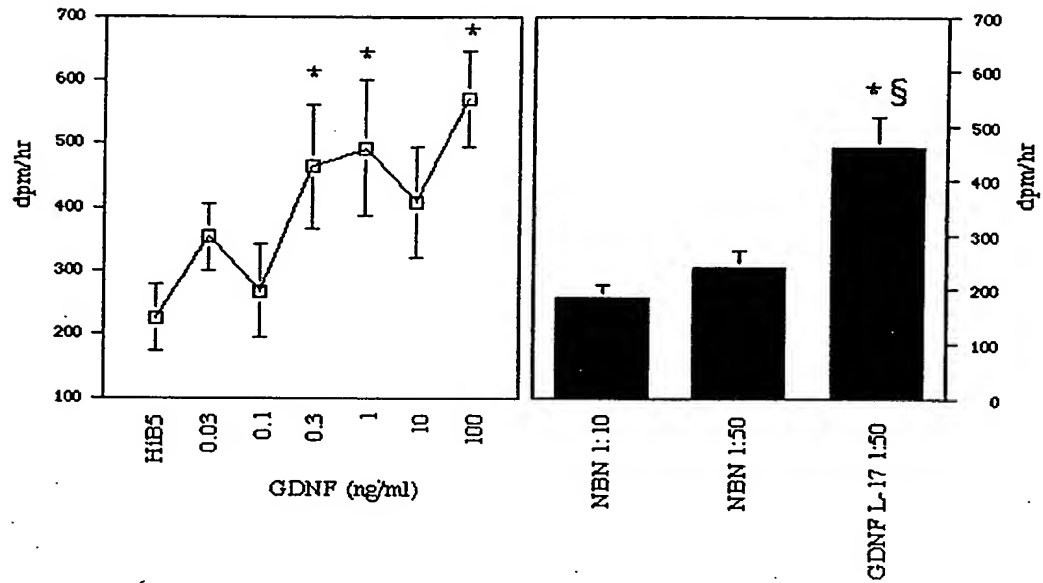
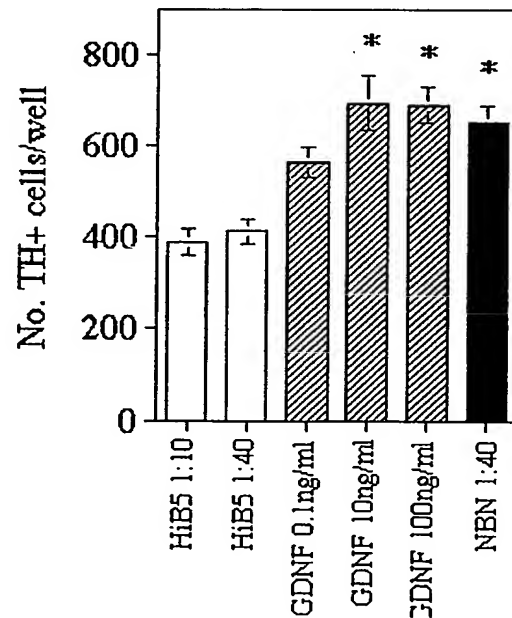


Fig. 3

## NBNI ChAT bioassay

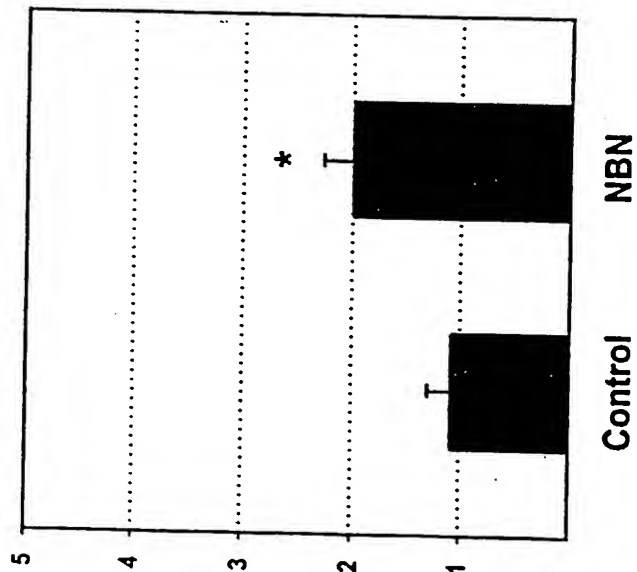


## TH+ cell number at DIV 7



Figs. 4A, 4B and 4C

Dopamine (pmol/ml) - day 12



Dopamine (pmol/ml) - day 21

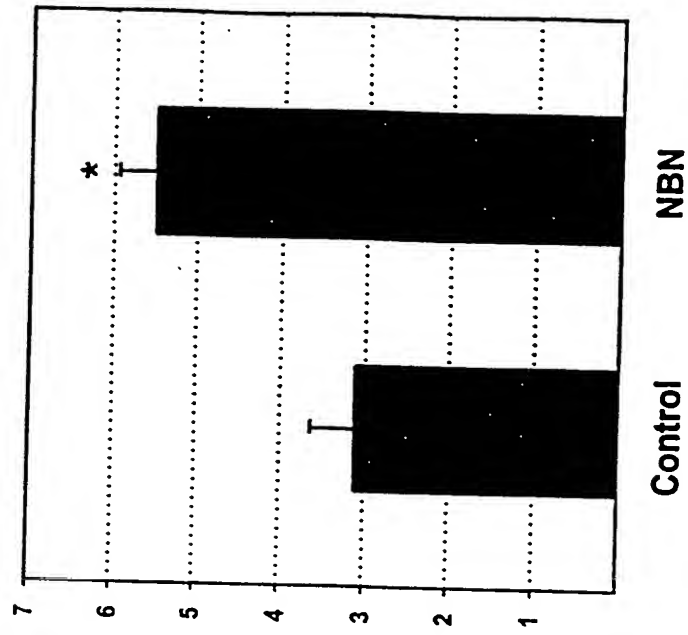


Fig. 5A and 5B

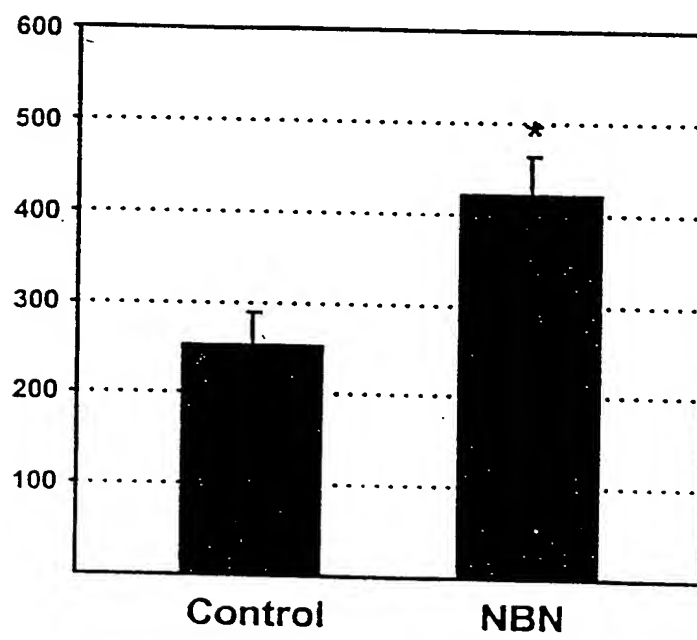
**TH-ir cells per culture**

Fig. 5C

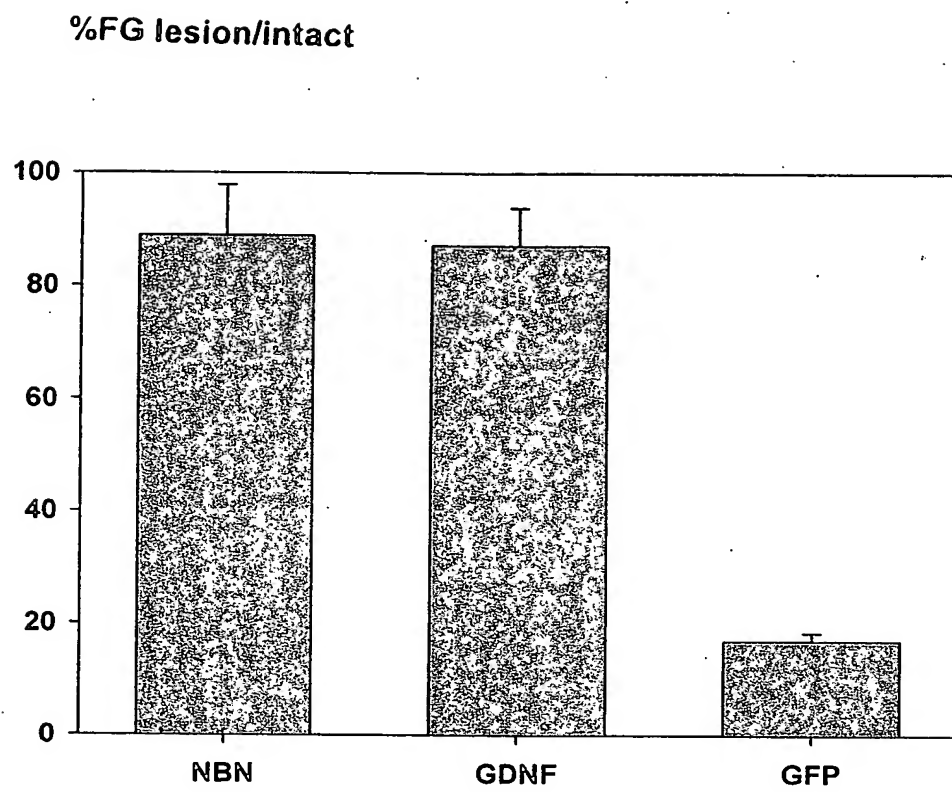


Fig. 6

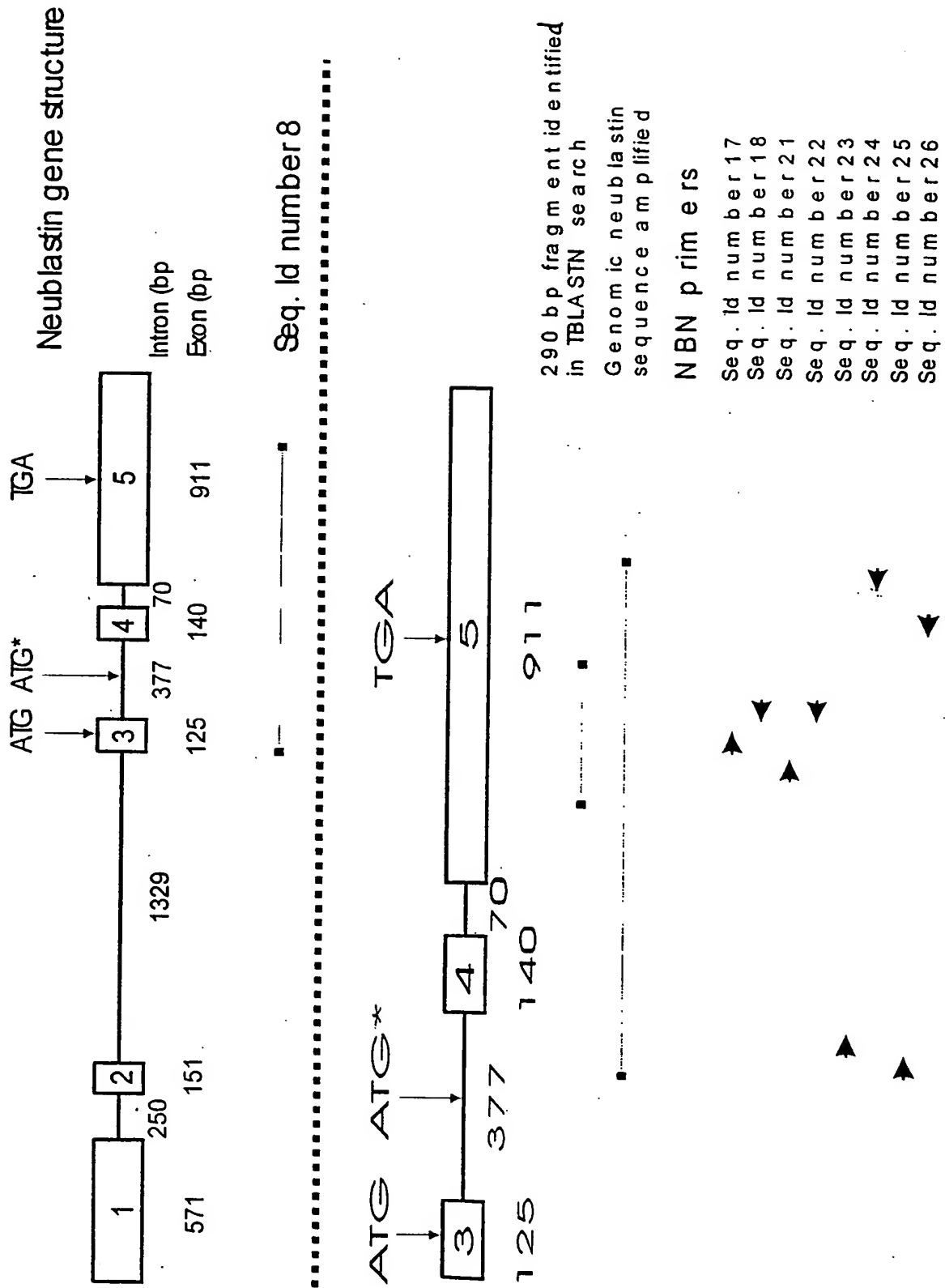


Fig. 7



Alignment of Neublastin primers used in Rapid-Screen with  
homologous regions in other GDNF ligands

|                                 |              |
|---------------------------------|--------------|
| 5' -C CTG GCC AGC CTA CTG GG-3' | SEQ ID No 17 |
| G CTG GCC CGG CTG CAG GG        | persephin    |
| G CTG CGA CGA CTG CGC CA        | neurturin    |
| A TTG AAA AAC TTA TCC AG        | GDNF         |

|                    |                |              |
|--------------------|----------------|--------------|
| 5' -AA GGA GAC CGC | TTC GTA GCG-3' | SEQ ID No 18 |
| TA GGC CAC GTC     | GGT GTA GCG    | persephin    |
| AA GGA CAC CTC GTC | CTC GTA GGC    | neurturin    |
| AA CGA CAG GTC ATC | ATC AAA GGC    | GDNF         |

conserved nucleotides shown in bold

Fig. 8

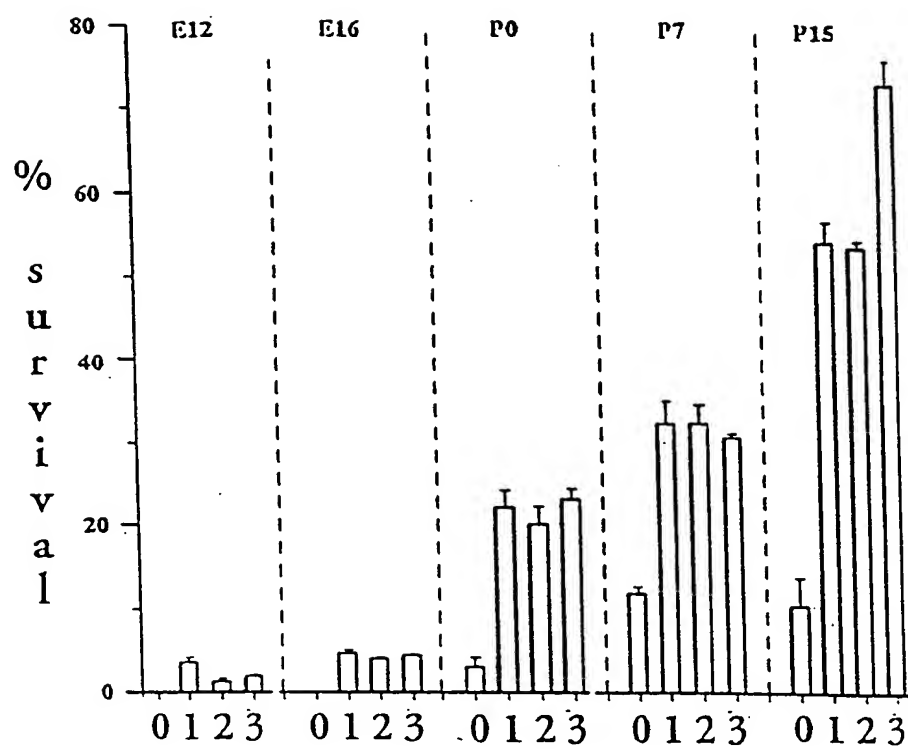


Fig. 9

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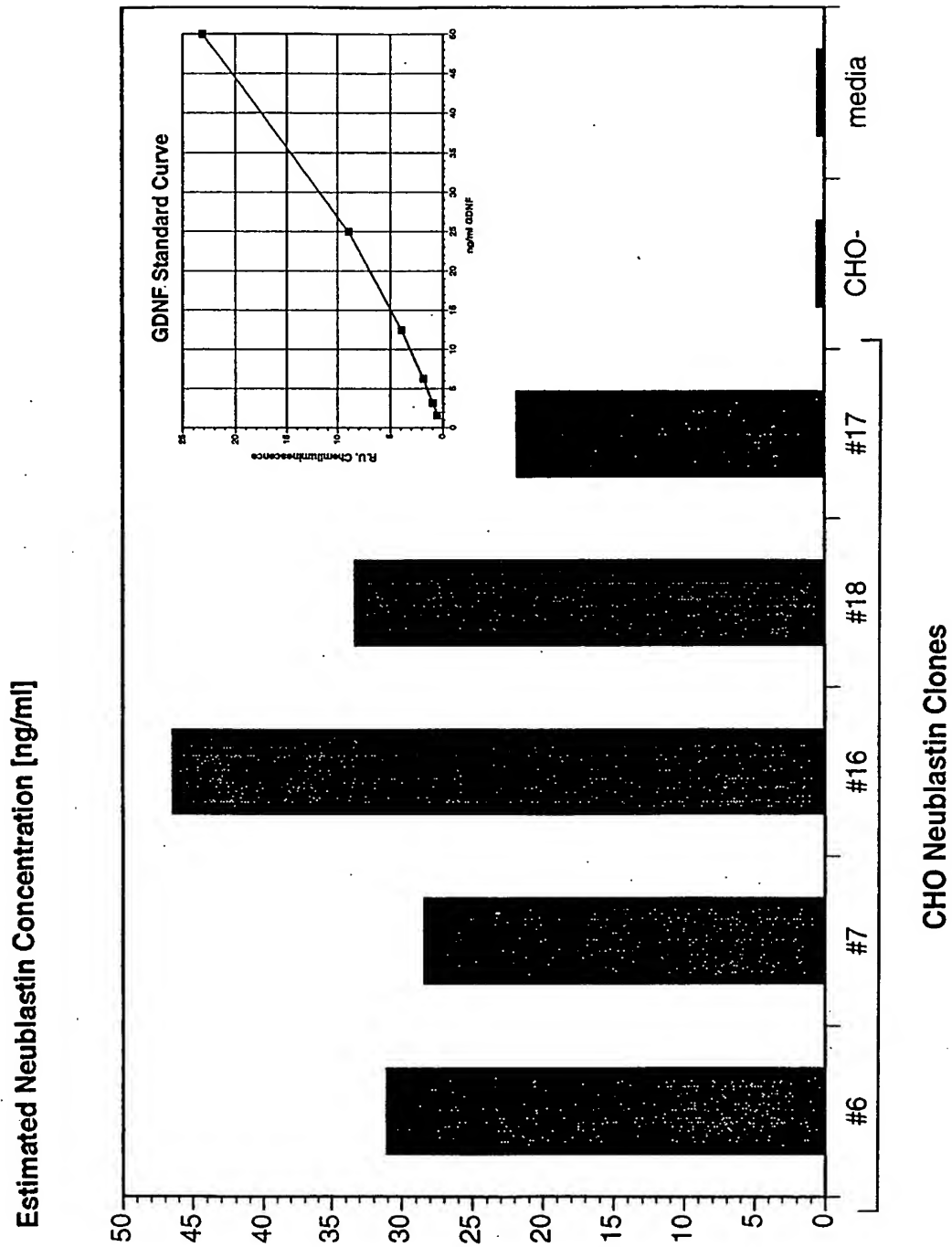


Fig. 10

Relative Chemiluminescence Units (R.U.)

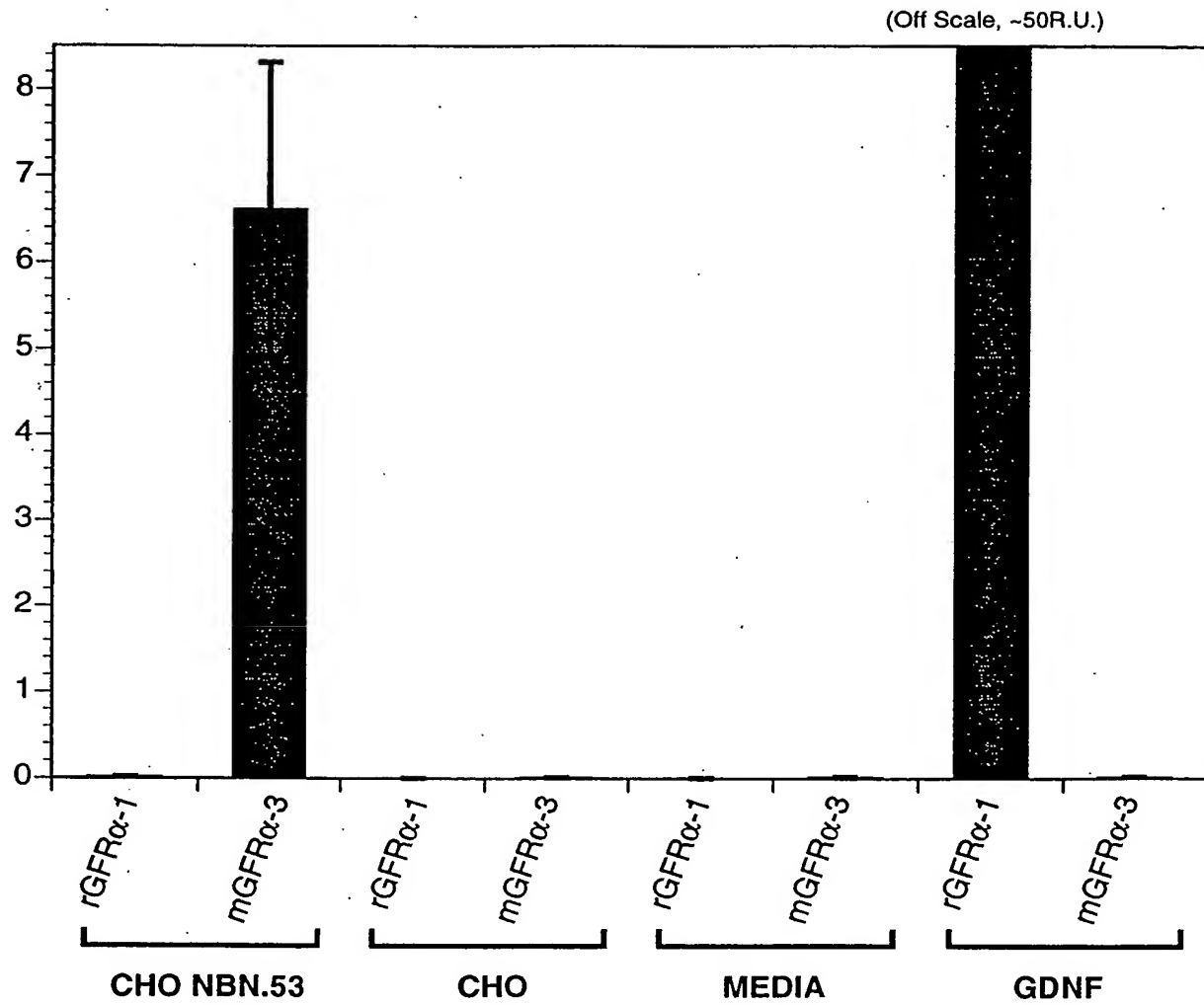
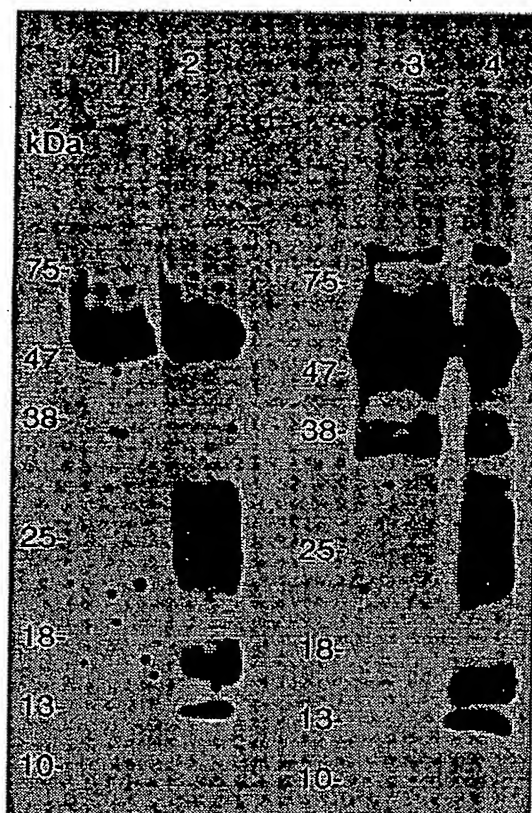
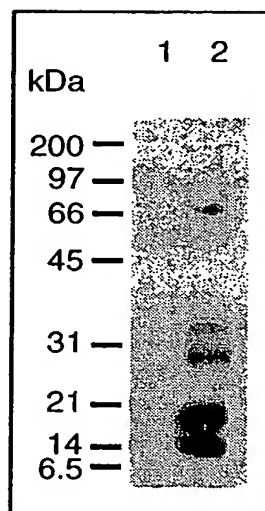


Fig. 11



1. Control medium stained with R30 anti-peptide antibody
2. Neublazin containing conditioned medium stained with R30 anti-peptide antibody
3. Control medium stained with R31 anti-peptide antibody
4. Neublazin containing conditioned medium stained with R31 anti-peptide antibody

Fig. 12

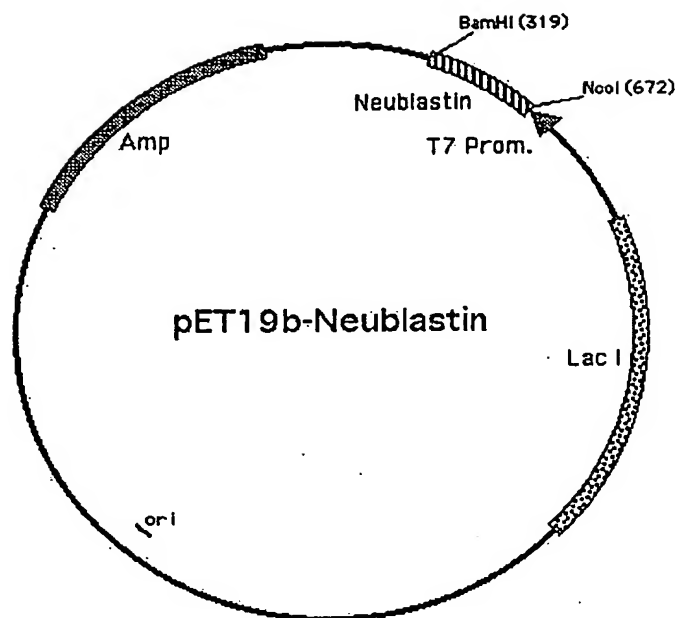


Extraction of neublastin by affinity-binding on RETL3-Ig

Lane 1: bound from CHO control conditioned media

Lane 2: bound from neublastin overexpressing CHO conditioned media

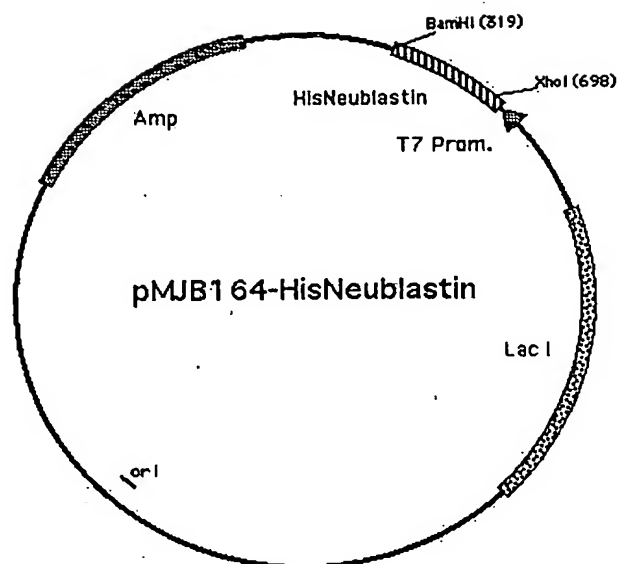
Fig. 13



### Neublastin Syngene

|             |             |            |            |            |            |
|-------------|-------------|------------|------------|------------|------------|
| NcoI (318)  |             |            |            |            |            |
| 316         | TACCATGGCT  | GGAGGACCGG | GATCTCGTGC | TCGTGCAGCA | GGAGCACGTG |
|             | ATCCTACCGA  | CCTCCTGGCC | CTAGAGCACG | AGCACGTCGT | CCTCGTGCAC |
| 1           | ▶ M A       | G G P      | G S R A    | R A A      | G A R      |
|             |             |            |            |            | G C R L    |
| 376         | GCGTTCTCAA  | CTAGTGCCGG | TGCGTGCACT | CGGACTGGGA | CACCGTTCCG |
|             | CGCAAGAGTT  | GATCACGGCC | ACGCACGTGA | GCCTGACCCT | GTGGCAAGGC |
| 19          | ▶ R S Q     | L V P      | V R A L    | G L G      | H R S      |
|             |             |            |            |            | D E L V    |
| 436         | ACGTTTTTCGT | TTTTGTTCAG | GATCTTGTCG | TCGTGCACGT | TCTCCGCATG |
|             | TGCAAAAGCA  | AAAACAAGTC | CTAGAACAGC | AGCACGTGCA | AGAGGCGTAC |
| 39          | ▶ R F R     | F C S      | G S C R    | R A R      | S P H      |
|             |             |            |            |            | D L S L    |
| 496         | AGCATCTCTA  | CTAGGAGCCG | GAGCACTAAG | ACCGCCGCCG | GGATCTAGAC |
|             | TCGTAGAGAT  | GATCCTCGGC | CTCGTGATTC | TGGCGGCGGC | CCTAGATCTG |
| 59          | ▶ A S L     | L G A      | G A L R    | P P P      | G S R      |
|             |             |            |            |            | P V S Q    |
| 556         | ACCTTGTTGT  | AGACCTACTA | GATACGAAGC | AGTATCTTTC | ATGGACGTAA |
|             | TGGAACAACA  | TCTGGATGAT | CTATGCTTCG | TCATAGAAAG | TACCTGCATT |
| 79          | ▶ P C C     | R P T      | R Y E A    | V S F      | M D V      |
|             |             |            |            |            | N S T W    |
| BamHI (671) |             |            |            |            |            |
| 616         | GAGAACCGTA  | GATAGACTAT | CTGCAACCGC | ATGTGGCTGT | CTAGGATGAT |
|             | CTCTTGGCAT  | CTATCTGATA | GACGTTGGCG | TACACCGACA | GATCCTACTA |
| 99          | ▶ R T V     | D R L      | S A T A    | C G C      | L G . . .  |
| 676         | CGGCT       |            |            |            |            |
|             | GCCGA       |            |            |            |            |

Fig. 14



## HisNeublastin

XhoI (340)

301 TACCATGGGC CATCATCATC ATCATCATCA TCATCATCAC TCGAGCGGCC ATATCGACGA  
 ATCTTACCCG GTAGTAGTAG TAGTAGTAGT AGTAGTAGTG AGCTCGCCGG TATAGCTGCT  
 1 ▶ M G H H H H H H H H H S S G H I D D

361 CGACGACAAG GCTGGAGGAC CGGGATCTCG TGCTCGTGCA GCAGGAGCAC GTGGCTGTCC  
 3CTGCTGTTC CGACCTCCTG GCCCTAGAGC ACGAGCACGT CGTCCTCGTG CACCGACAGC  
 19 ▶ D D K A G G P G S R A R A A G A R G C R

421 TCTGCGTTCT CAACTAGTGC CGGTGCGTGC ACTCGGACTG GGACACCGTT CCGACGAACT  
 AGACGCAAGA GTTGATCACG GCCACGCACG TGAGCCTGAC CCTGTGGCAA GGCTGCTTGA  
 39 ▶ L R S Q L V P V R A L G L G H R S D E L

481 AGTACGTTTT CGTTTTTGTT CAGGATCTTG TCGTCGTGCA CGTTCTCCGC ATGATCTATC  
 TCATGCAAAA GCAAAAACAA GTCCTAGAAC AGCAGCACGT GCAAGAGGCG TACTAGATAG  
 59 ▶ V R F R F C S G S C R R A R S P H D L S

541 TCTAGCATCT CTACTAGGAG CCGGAGCACT AAGACCGCCG CCGGGATCTA GACCTGTATC  
 AGATCGTAGA GATGATCCTC GGCCTCGTGA TTCTGGCGGC GGCCCTAGAT CTGGACATAG  
 79 ▶ L A S L L G A G A L R P P P G S R P V S

601 TCAACCTTGT TGTAGACCTA CTAGATACGA AGCAGTATCT TTCATGGACG TAAACTCTAC  
 AGTTGGAACA ACATCTGGAT GATCTATGCT TCGTCATAGA AAGTACCTGC ATTTGAGATG  
 99 ▶ Q P C C R P T R Y E A V S F M D V N S T

661 ATGGAGAACC GTAGATAGAC TATCTGCAAC CGCATGTGGC TGTCTAGGAT GATAATAGGG  
 TACCTCTTGG CATCTATCTG ATAGACGTTG GCGTACACCG ACAGATCCTA CTATTATCCC  
 119 ▶ W R T V D R L S A T A C G C L G . .

721 ATCCGGCTGC TAACAAAGCC CG  
 TAGGCCGACG ATTGTTTCGG GC

BamHI (719)

Fig. 15